Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Advanced Television Systems	)	
and Their Impact upon the	)	**MM Docket No. 87-268**
Existing Television Broadcast	)	
Service	)	

COMMENTS OF THE CONSUMER ELECTRONICS GROUP OF THE ELECTRONIC INDUSTRIES ASSOCIATION

The Consumer Electronics Group of the Electronic Industries Association ("EIA/CEG") hereby responds to the Commission's Second Further Notice of Proposed Rulemaking ("Notice"), which was released by the Commission on August 14, 1992. Most of the issues raised in the Notice can more appropriately be addressed by other interested parties. A few issues, however, warrant comment from the perspective of consumer electronics manufacturers.

Use of UHF Channels

The Notice expresses a tentative inclination to locate all advanced television ("ATV") operations in the UHF television band, in part "to simplify ATV equipment design" and in part "to reduce technical disparities between stations." Notice at ¶ 17. EIA/CEG does not oppose the Commission's proposal to adopt, as an ATV allotment

objective, the goal of limiting ATV allotments exclusively to the UHF band. But we do not believe that equipment design considerations are a relevant consideration in this particular context.

The Notice states that "use of a single contiguous band would simplify the design of TV receivers and antennas by removing the need for tuning signals in more than one band." Notice at ¶ 17. There is some truth to this statement, but EIA/CEG is of the view that any savings that would result from simplification of this aspect of receiver design would be quite small (just a few dollars in terms of manufacturers' costs), especially in relation to the cost of a large-screen ATV receiver. Further, it will continue to be necessary to manufacture television receivers in contemplation of their connection to cable television facilities, and there is no current reason to believe that cable system operators will cease to use VHF frequencies. Thus, we do not not believe that a UHF-only policy for ATV channel allotments will be of significant consequence in terms of receiver design or expenses to consumers.

We do not dispute the potential benefit of equalizing coverage areas and reception characteristics among broadcasters. See Notice at ¶¶ 18-20. And we welcome the possibility that, after the transition to ATV is completed, the VHF band may become available for new radio

services. See Notice at ¶ 18 n.24. Still, for purposes of developing a record for informed decision-making, we believe the Commission should understand that limiting ATV allotments to UHF frequencies is not likely to generate any significant benefits in terms of cost or complexity of consumer equipment.

Channel 6. The Notice briefly discusses the potential interference issues that might arise if ATV channels were to use the VHF band, particularly Channel 6. The rules currently are designed to minimize the danger of interference from Channel 6 to FM radio stations operating at 98.5 MHz and to Channel 6 from stations operating at 88.1 to 91.1 MHz. It is not clear to EIA/CEG that the same interference mechanisms would apply in the case of ATV as they do in the NTSC environment, but we do not disagree with the notion of keeping Channel 6 ATV allotments to a minimum.

Channels 3 and 4. Similar observations apply to use of Channels 3 and 4. Again, the Commission is trying to avoid use of the VHF band altogether, and it has proposed no ATV allotments on Channels 3 or 4. See Notice at ¶¶ 43-44. As a result, there does not seem to be any need to run the risk of increasing the direct pick-up interference problems that currently exist in some communities with some equipment.

Industry is currently working to reduce direct-pickup problems by developing a baseband interface between the cable terminal device and the receiver. It now seems likely that ATV videocassette recorders and cable converters will not operate at Channels 3 or 4 but transfer their signals to the television set at baseband. An EIA committee is actively at work on this issue, and current expectations are that ATV signals will not need to be remodulated back to Channels 3 or 4. These efforts are not yet complete, and ATV equipment designs have scarcely begun, so some uncertainty remains unavoidable. In any event, the Commission's plan to avoid ATV allotments at Channels 3 and 4 seems a prudent course, and we support it.

Economical Tuner Designs

The Notice seeks comment on "the relationship between economical tuner designs and acceptable spacings between stations on adjacent and UHF taboo channels and the possible need for maintaining specific taboos." Notice at ¶ 29. A definitive discussion of this issue would be premature at this time, but industry is optimistic that receiver cost and performance objectives need not constrain ATV channel allotments.

As the Commission is aware, only limited test data are currently available concerning the operation of the

candidate ATV systems. Industry does not yet know which system will be selected. Also, the tuners used by the ATV system proponents may not be representative of those which would be used by consumers (where very different price pressures come into play). Until final test data are reviewed for the selected system, the performance of real-world tuners will necessarily remain subject to some uncertainty.

Nonetheless, we believe that commercially practical tuners can be designed that will accommodate the allotments the Commission is developing. The tuner requirements which have been assumed in the allotment planning process -- in terms of noise figures, linearity, and selectivity -- should allow individual manufacturers to achieve price and performance goals within the Commission's planned spacing arrangements.[1]

We anticipate that ATV future receivers may need to be more immune to interference than are NTSC receivers today, but we are optimistic that receiver manufacturers can meet the challenge. It bears emphasis that EIA/CEG does <u>not</u> believe the Commission should establish performance or design requirements for ATV tuners. It should be the

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1/ Of course, it is important that NTSC channel allotments not be changed. To do so would increase the dangers of one NTSC signal interfering with reception of another NTSC signal. In other words, existing NTSC "taboos" must continue to be maintained.

responsibility of receiver manufacturers to develop tuner designs which deliver the necessary protection.

We welcome the opportunity to share our views on these subjects and look forward to continuing our cooperation toward the goal of achieving a smooth and successful implementation of ATV.

Respectfully submitted,

CONSUMER ELECTRONICS GROUP
ELECTRONIC INDUSTRIES ASSOCIATION

By: Suzanne Heaton
Suzanne Heaton
Staff Vice President
Government and Legal Affairs

By: George A. Hanover
George A. Hanover
Staff Vice President
Engineering

2001 Pennsylvania Avenue, N.W.
Washington, D.C. 20006
(202) 457-4900

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